



## *Cotton/Soybean Insect Newsletter*

Volume 15, Issue #19 Edisto Research & Education Center in Blackville, SC 11 September 2020

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### **Pest Patrol Alerts**

The information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message often for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

### **Updates on Twitter**

When noteworthy events happen in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at [@bugdocisin](https://twitter.com/bugdocisin) on Twitter.



### **Last Issue of Newsletter for 2020**

This will be the final issue of Volume 15. I hope you found the content to be timely and informative. I would like to ask for your assistance in evaluating the newsletter. Please go to the survey link below to answer (anonymously) a few questions about the newsletter, provide feedback on improvement, and let me know if you find the newsletter useful. In order to continue providing news through this format, I need some input (positive or negative) from clientele in order to justify the time spent on communicating in this manner. Thank you for your time. Here is the link to the survey:

[https://clemson.ca1.qualtrics.com/jfe/form/SV\\_3NN4zO9ncVbDTGI](https://clemson.ca1.qualtrics.com/jfe/form/SV_3NN4zO9ncVbDTGI)

### **News from Around the State**

**Charles Davis**, county agent in Calhoun County, reported "most everything is moving out of the danger zone. Final sprays going on for stink bugs, and the focus is shifting to peanuts. Bottom bolls opening pretty fast." **Jay Crouch**, county agent in Newberry County, reported they are "reaching defoliation threshold in soybeans in Lexington/Edgefield/Saluda areas. Mainly VBC (pictured at right) with a few green cloverworms thrown in the mix. Stink bug counts also reaching threshold - sprays started last week." **Chris Talley**, county agent in Anderson County, reported "seeing more worms popping up in soybeans (VBC, GCW, and SBL). All have been just below threshold levels but keeping a weekly eye on them. VBC was one that caused most trouble this time last year." **Jonathan Croft**, county agent in Orangeburg County, reported he received reports of a lot of VBC in fields that have not been sprayed yet. Growers are spraying them now. They are also showing up in peanuts." Send me your reports for this section next season!



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### Virtual Field Days

Clemson University is offering a handful of virtual field days this fall. The Edisto REC field day went live yesterday, and it is still available for viewing online. Field days for the Baruch Institute, the Pee Dee REC, and the Edisto REC are posted at: [www.clemson.edu/fieldday](http://www.clemson.edu/fieldday). Field days for the Piedmont REC and the Sandhill REC will go live on 17 September and 1 October, respectively.

### Cotton Situation

As of 6 September 2020, the USDA NASS South Carolina Statistical Office estimated that about 92% of the crop has set bolls, compared with 87% at this time last week, 100% at this time last year, and 99% for the 5-year average. About 6% of bolls are opening, compared with 4% at this time last week, 51% at this time last year, and 40% for the 5-year average. The condition of the crop was described as 18% excellent, 55% good, 16% fair, 6% poor, and 5% very poor. These are observed/perceived state-wide averages.

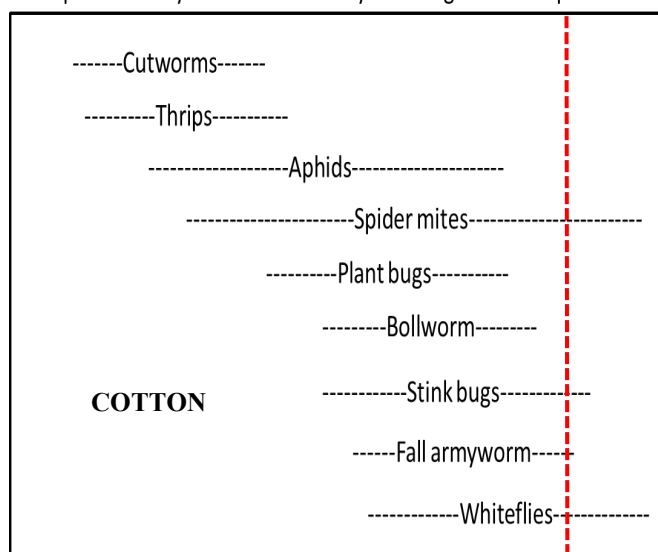
### Cotton Insects

Captures of bollworm moths in pheromone traps have decreased significantly. However, I have some non-Bt cotton planted on 17 June that continues to sustain injury from bollworm. In a small planting date study to look at the effect of planting date (early, mid, late) on bollworm and injury in cotton, the mid-June planting date will most likely take the hardest hit from bollworm, and plant mapping and yields will show it clearly. The three planting dates were 16 April, 14 May, and 17 June.



Here is an injured boll and a bollworm hanging out of it from this week. I will report on these findings at the winter meetings, for sure.

April May June July August September



Stink bugs have been reproducing like crazy in recent weeks, and the results are showing. Eggs have hatched, and many immature stink bugs are trying to make it to the adult stage. The only way they do that is by eating, as they don't have a choice at this point, without their wings yet! I am seeing stink bug numbers explode in soybeans, and they are out there in cotton also. I am confident in our dynamic boll-injury thresholds for stink bugs, but insecticide termination at season's end requires some good judgement at the field level by consultants and producers. There are many factors to consider at the end of the season.

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## Soybean Situation

As of 6 September 2020, the USDA NASS South Carolina Statistical Office estimated that about 90% of the crop has bloomed, compared with 86% the previous week, 94% at this time last year, and 96% for the 5-year average. About 66% of the crop has set pods, compared with 55% the previous week, 51% at this time last year, and 72% for the 5-year average. The condition of the crop was described as 31% excellent, 55% good, 7% fair, 3% poor, and 4% very poor. These are observed/perceived state-wide averages.

## Soybean Insects

Any soybeans out there that have yet to receive insecticide for defoliating insects are probably starting to look pretty ragged at this point. I have plenty of unprotected research plots that have sustained economic defoliation from a complex of caterpillars, including velvetbean caterpillar (VBC), soybean looper (SBL), and green cloverworm (GCW). We have gathered some good data this season on insecticide control of this complex and will share the results in our winter meetings. Stink bugs continue to reproduce in and damage soybeans. I easily found the species pictured here in soybeans this week, and they were quite numerous and happy.

April May June July August September October

-----Threecornered alfalfa hopper-----

-----Grasshoppers, other misc. defoliators-----

-----Tobacco budworm-----

-----Corn earworm-----

-----Kudzu bugs-----

-----Green cloverworm-----

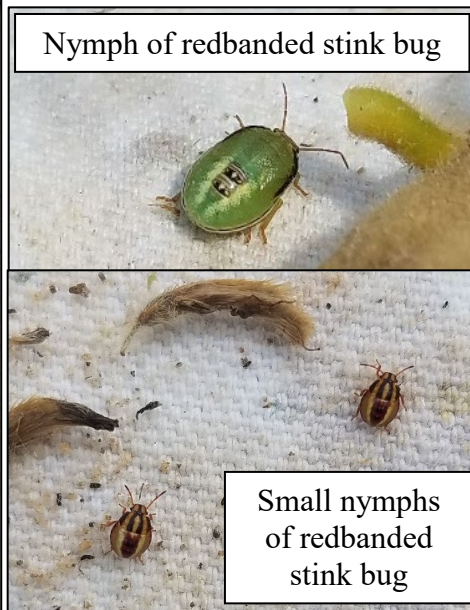
-----Soybean looper-----

SOYBEAN -----Stink bugs-----

-----Velvetbean caterpillar-----

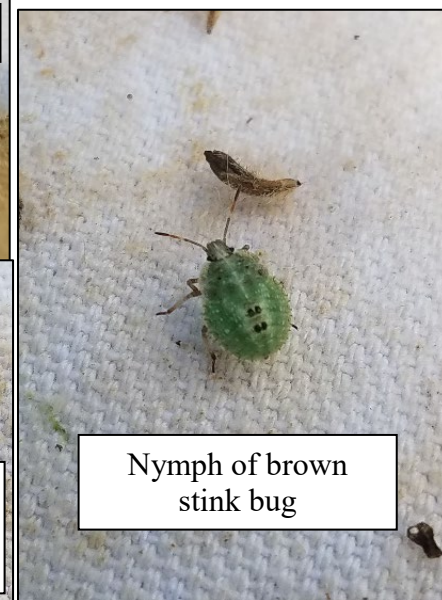


Nymphs of southern green stink bug



Nymph of redbanded stink bug

Small nymphs of redbanded stink bug



Nymph of brown stink bug

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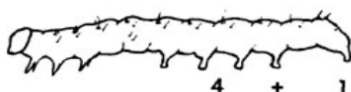




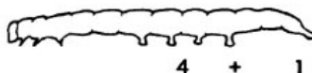
Be able to recognize larvae and moths! Use the chart here for identifying adults and larvae.



## FIELD KEY TO COMMON SOYBEAN CATERPILLARS



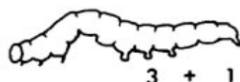
**CORN EARWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



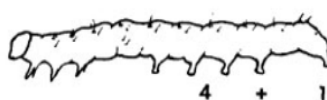
**VELVETBEAN CATERPILLAR**  
4 + 1 pair prolegs  
Very active when handled



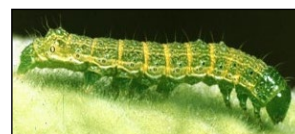
**SOYBEAN LOOPER**  
2 + 1 pair prolegs  
Fatter at tail end  
Looping movement



**GREEN CLOVERWORM**  
3 + 1 pair prolegs  
Not fatter at tail end  
Looping movement



**TOBACCO BUDWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



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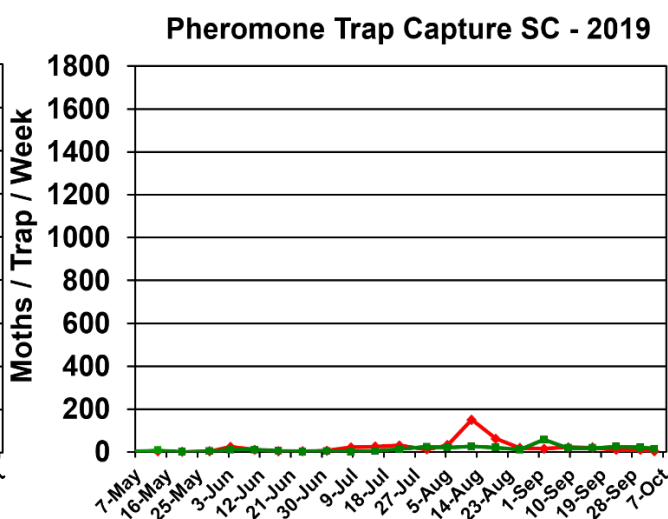
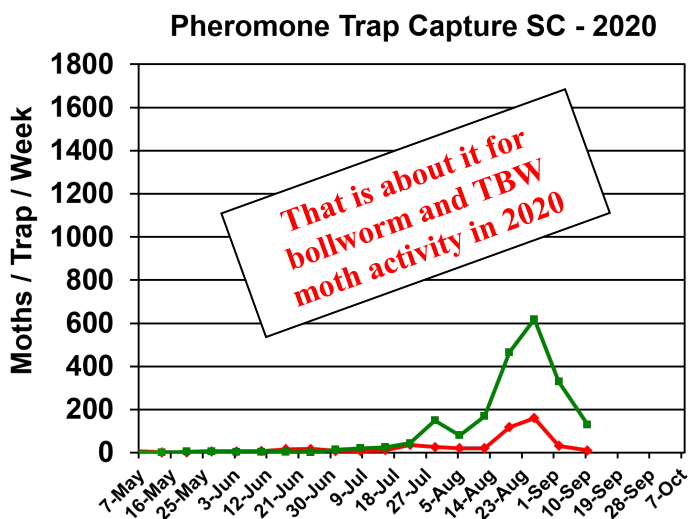


## Bollworm & Tobacco Budworm

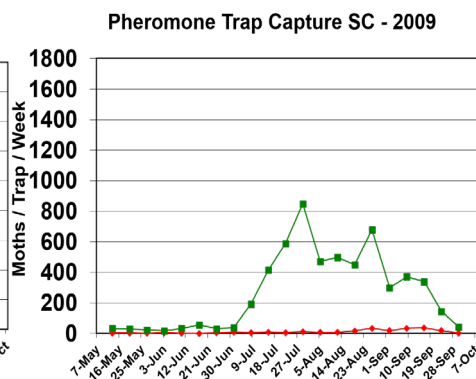
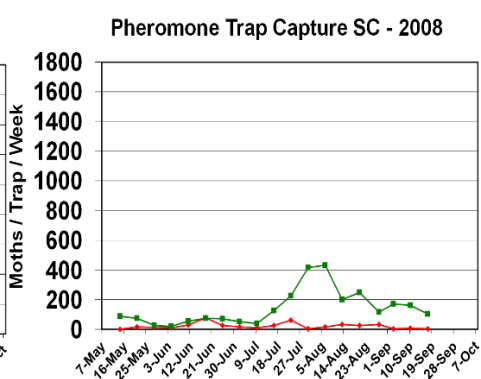
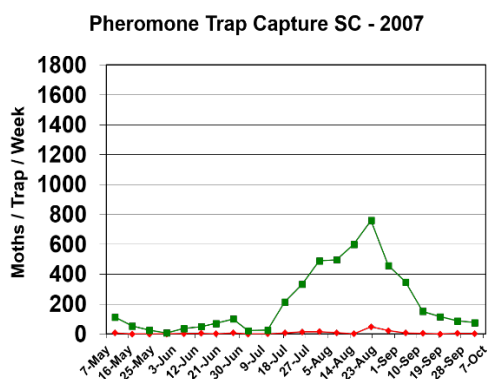


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2019 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



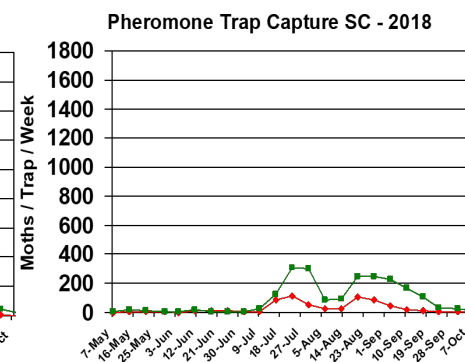
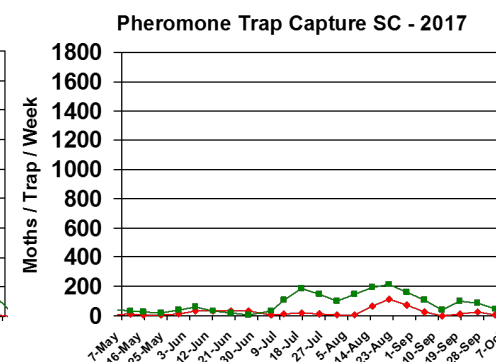
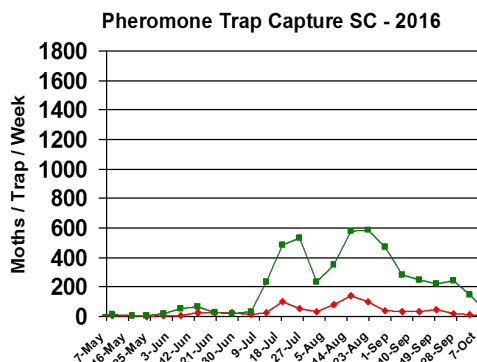
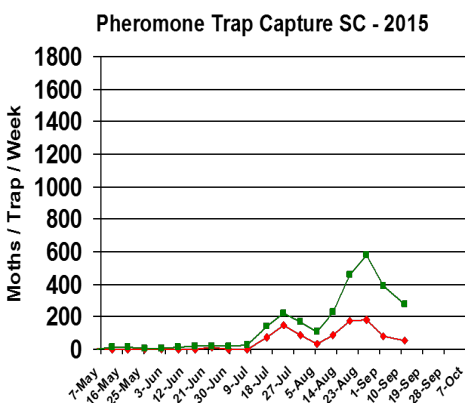
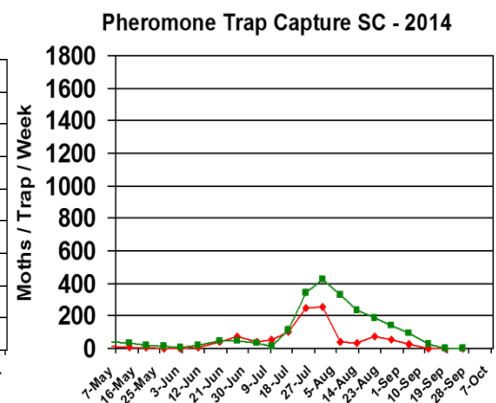
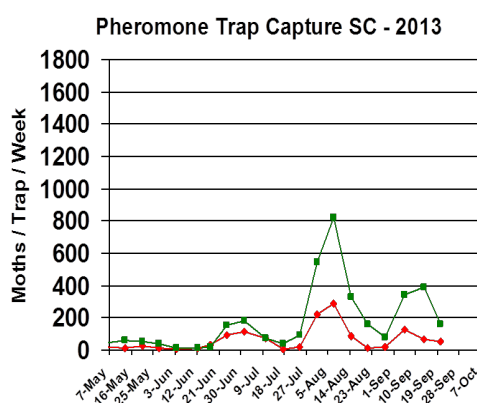
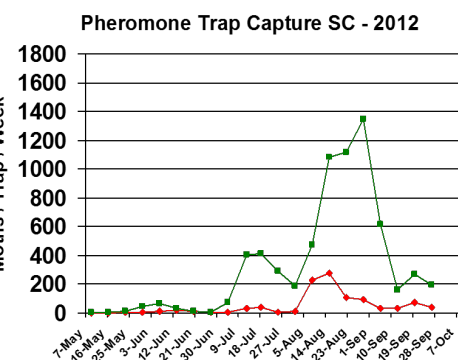
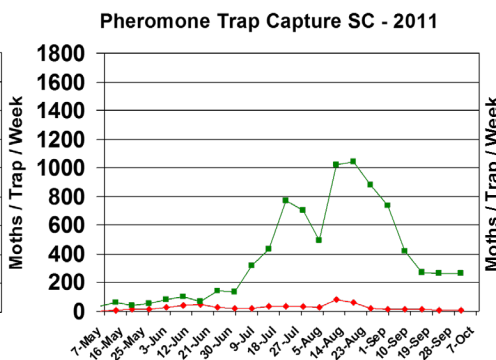
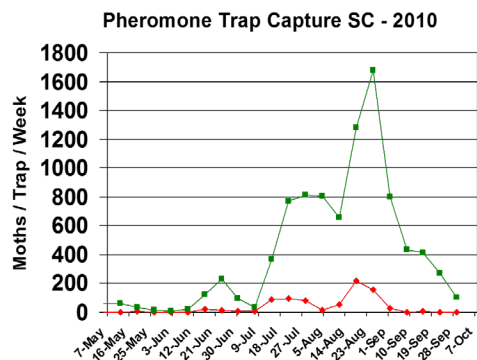
Trap data from 2007-2018 are shown below for reference to other years of trapping data from EREC:



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## **Pest Management Handbook – 2020**

Insect control recommendations are available online in the 2020 South Carolina Pest Management Handbook at:

<https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

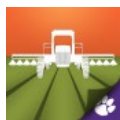
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For historical cotton/soybean insect newsletters:

<https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html>

Sincerely,

Jeremy K. Greene, Ph.D.  
Professor of Entomology



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